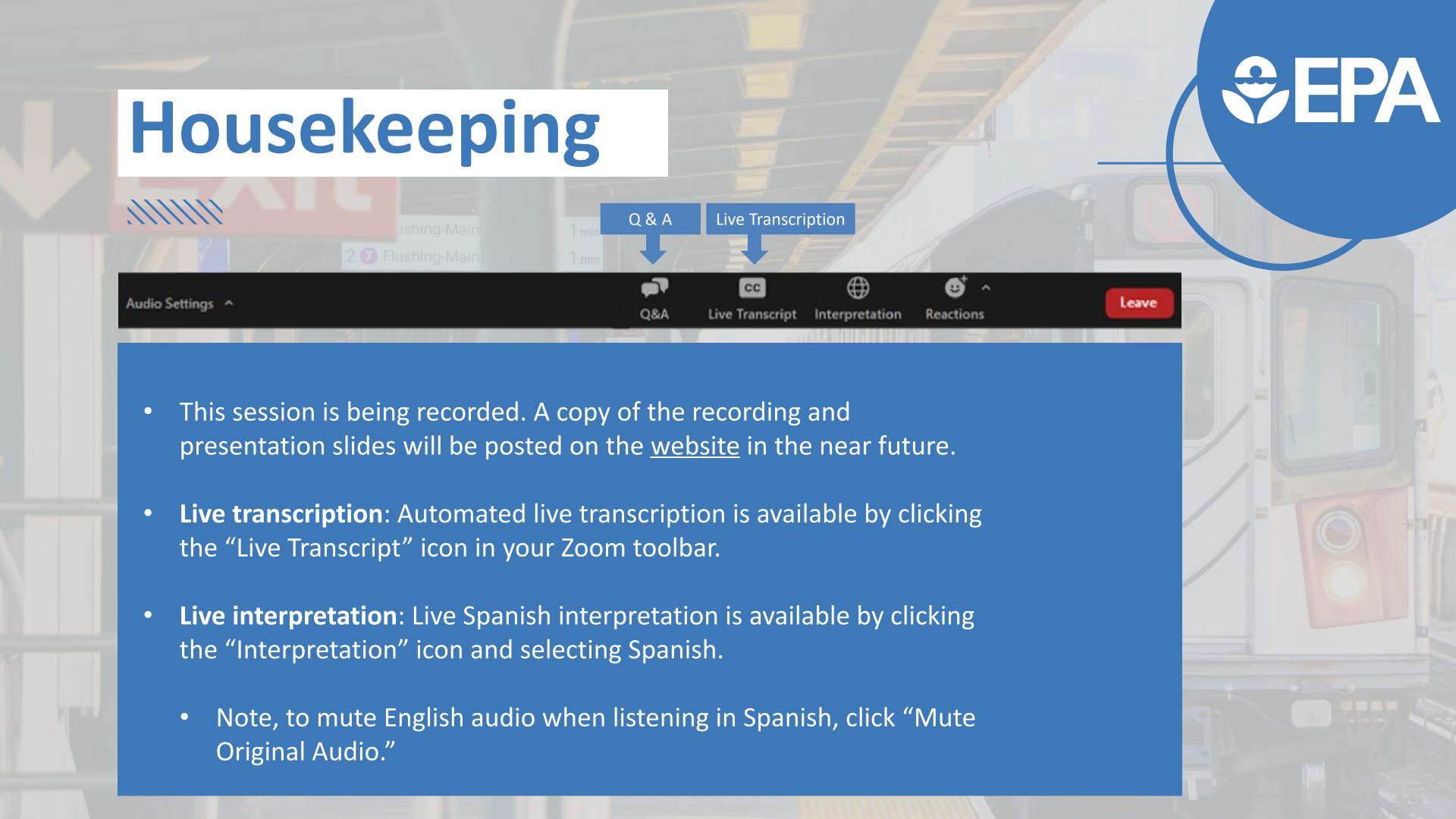




U.S. Environmental Protection Agency

August 9, 2023





Housekeeping

SEPA

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- Feel free to use the Q&A feature for any specific questions you have during the webinar.
- All participants are muted.
- Please be respectful as we are all here to learn and take away valuable insights about these funding opportunities.



Transportation Agenda

1. Introduction

2. Panel Discussion

3. Agency Presentations

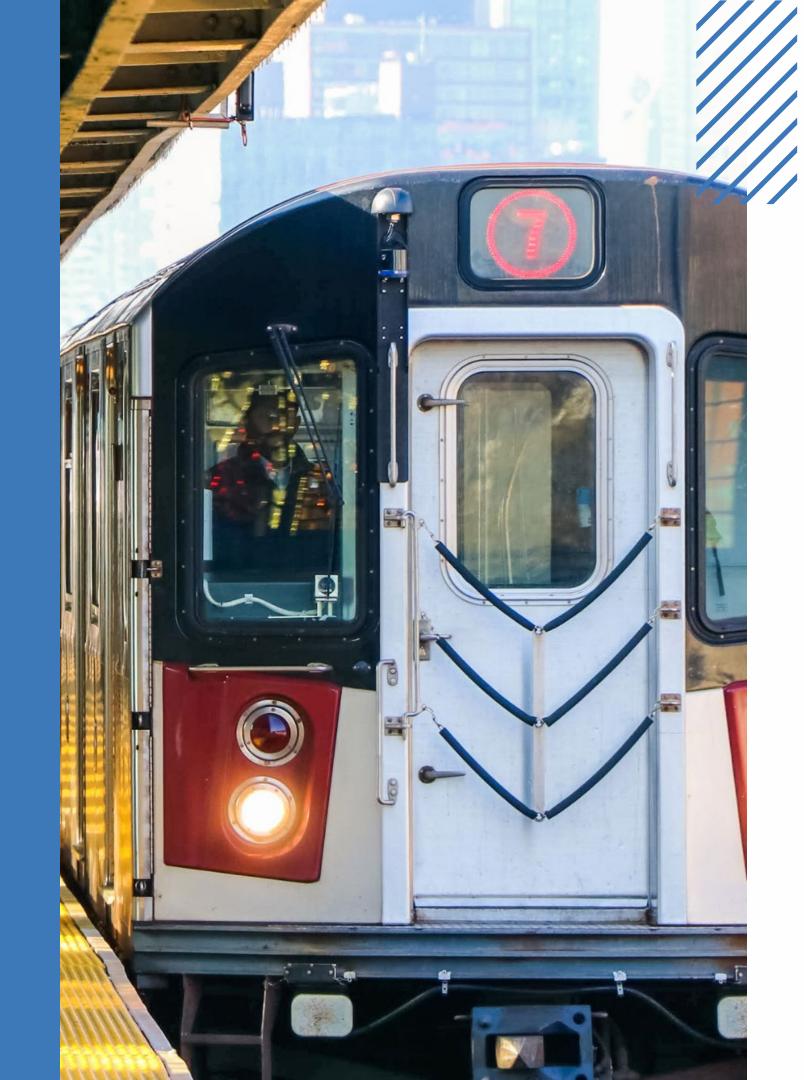
4. Questions

5. Closing



Why We Are Here

What are the Climate Pollution Reduction Grants (CPRG) and how do they relate to why we're here today?





Panel Discussion

Moderated by Ale Nunez
EPA, Deputy Assistant Administrator for
Mobile Sources



Meet Our Panelists











Ale Nunez EPA

Deputy Assistant
Administrator for Mobile
Sources

Karl Simon EPA

Director of the
Transportation and Climate
Division

Michael Berube DOE

Deputy Assistant Secretary for Sustainable Transportation and Fuels

Barbara Nelson Port of Virginia

VP of Development and Transportation Policy,

Meredith Epstein WRI

Federal Policy Lead of the Electric School Bus Initiative





Federal Agency Presentations

EPA: Mike Moltzen

DOT: Tina Hodges





EPA TransportationFunding Opportunities

CPRG's Investing in America: Climate Action Funding Fair

August 9, 2023

Overview of Transportation Programs

- Bipartisan Infrastructure Law (BIL)/Infrastructure Investment and Jobs Act (IIJA)
 - Clean School Bus (CSB) Program
- Inflation Reduction Act (IRA)
 - Clean Ports Program (60102)
 - Clean Heavy-Duty Vehicle Program (60101)
 - Diesel Emissions Reduction Act (DERA) (60104)
 - Mobile Source Grants to States (60105g)



BIL Clean School Bus Program: Overview



- \$5 billion over 5 years (FY22-FY26) for the replacement of existing school buses with low and zero-emission (ZE) school buses through **grants and rebates**. Under the statutory design for the CSB Program, half of the available funding is dedicated to ZE school buses and half is dedicated to clean school buses.
- This funding to support clean and ZE vehicles that transport our nation's children will benefit communities across the United States, especially communities that have been historically underserved. The reduction in greenhouse gas (GHG) emissions from these bus replacements also helps address the outsized role of the transportation sector in fueling the climate crisis.
- The Bipartisan Infrastructure Law allows EPA to prioritize certain communities that will benefit from the CSB program.
- Last fall, the rebate program awarded about \$965 million to approximately 400 school districts to help replace about 2,400 buses through the 2022 Rebate Program. The majority of applicants met priority criteria as low-income, rural, or Tribal.

BIL Clean School Bus Program: Eligible Entities for 2023 Grant Program

1. Local or State governmental entities responsible for:

- Providing school bus service to one or more public school systems, or
- The purchase, lease, license, or contract for service of school buses;

2. Indian Tribes, Tribal organizations, and tribally controlled schools that are responsible for:

- Providing school bus service to one or more Bureau-funded schools, or
- The purchase, lease, license, or contract for service of school buses; nonprofit school transportation association; and eligible contractors;
- 3. Public charter school districts responsible for the purchase, lease, license, or contract for service of school buses for that charter school

4. Eligible contractors that have the capacity:

- To sell, lease, license, or contract for service clean school buses, zero-emission school buses, charging or fueling
 infrastructure, or other equipment needed to charge, fuel, or maintain clean school buses or zero emission school
 buses, to individuals or entities that own, lease, license, or contract for service a school bus or a fleet of school
 buses; or
- Arrange financing for such a sale, lease, license, or contract for service;

5. Nonprofit transportation associations that:

- Are operated primarily for scientific, educational, service, charitable or similar purposes in the public interest;
- Are not organized primarily for profit; and
- Use their net proceeds to maintain, improve and/or expand their operations.

BIL Clean School Bus Program: Timing

- 2023 Grant Program is open now until August 22, 2023 11:59pm ET
 - Anticipated notice of selection November 2023- January 2024
 - Anticipated Awards February- March 2024
- Anticipate opening the 2023 Rebate Program in Fall 2023
- Submit questions to <u>CleanSchoolBus@epa.gov</u> and visit <u>https://www.epa.gov/cleanschoolbus</u> for more information and to stay up-to-date on programmatic updates



BIL Clean School Bus Program Resources and Guidance

Visit <u>www.epa.gov/cleanschoolbus</u> for resources from:

- EPA Clean School Bus Program
 - Technical Assistance
 - Workforce Development and Training
 - Charging and Fueling Infrastructure Resources
- Joint Office of Energy and Transportation
 - AFDC School Transportation Page
 - Rural EV Toolkit
 - NEVI Utility Finder
- Non-Federal Resources
 - 2023 STN Buyer's Guide
 - Preparing to Plug In Your Bus Fleet

... and more!





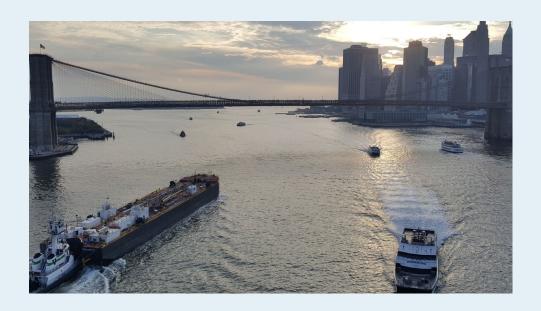
IRA Clean Ports Program: Overview and Timing

 \$3B (\$750M to be spent in nonattainment areas) to fund grants and rebates for zero-emissions port equipment or technology (e.g., electric or fuel cell dray trucks, harbor craft, locomotives, and cargo handling equipment)

 Can also support development of port climate and air quality action plans

Timeline for funding TBD

 For questions, reach out to <u>cleanports@epa.gov</u> and check out https://www.epa.gov/inflation-reduction-act/clean-ports-program for programmatic updates





IRA Clean Ports Program: Eligible Entities

- 1. Port authority
- 2. State, regional, local, or Tribal agency that has jurisdiction over a port authority or a port
- 3. Air pollution control agency
- 4. Or private entity that applies for a grant in partnership with an entity above; and owns, operates, or uses the facilities, cargo handling equipment, transportation equipment, or related technology of a port.

IRA Clean Ports Program: EPA Ports Initiative Resources and Guidance

- Visit <u>www.epa.gov/ports-initiative</u> for:
 - Tools to help identify smart infrastructure investments like:
 - National Port Strategy Assessment: Reducing Air Pollution and Greenhouse Gases at U.S. Ports
 - Port Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Goods Movement Mobile Source Emissions
 - Shore Power Technology Assessment and Calculator (2022 update)
 - Best Practices Web Area including Interactive Map Highlighting Clean Air Practices at Ports
 - Community-Port Collaboration Toolkit



IRA Clean Heavy-Duty Vehicle Program: Overview and Timing

- \$1 billion available for Class 6/7 zero-emissions replacements (e.g., electric or fuel cell delivery trucks, refuse trucks, utility trucks, school buses, and day cab tractors)
- Can also support workforce development and other planning activities
- Timeline for funding TBD
- For questions, reach out to <u>cleanhdvehicles@epa.gov</u> and check out https://www.epa.gov/inflation-reduction-act/clean-heavy-duty-vehicle-program for programmatic updates

IRA Clean Heavy-Duty Vehicle Program: Eligible Activities

- The incremental costs of replacing an eligible vehicle that is not a zero-emission vehicle with a zero-emission vehicle, as determined by the Administrator based on the market value of the vehicles;
- Purchasing, installing, operating, and maintaining infrastructure needed to charge, fuel, or maintain zero-emission vehicles;
- Workforce development and training to support the maintenance, charging, fueling, and operation of zero-emission vehicles;
- And planning and technical activities to support the adoption and deployment of zero-emission vehicles.

IRA Clean Heavy-Duty Vehicle Program: Eligible Entities

- 1. Eligible contractor
- 2. State
- 3. Municipality
- 4. Indian tribe
- 5. Or nonprofit school transportation association

IRA DERA Program: Overview and Timing

- \$60 million available, in addition to annual appropriations, for grants to goods movement projects in disadvantaged communities only
- Anticipate posting a Notice of Funding Opportunity with the FY24 DERA National Grant Program
- For questions, reach out to <u>DERA@epa.gov</u> and check out https://www.epa.gov/dera for programmatic updates

IRA Mobile Source Grants to States: Overview

- Under Section 60105g, there is \$5 million available to provide grants to States to adopt and implement greenhouse gas and zero-emission standards for mobile sources pursuant to section 177 of the Clean Air Act (42 U.S.C. 7507)
- Held two listening sessions with States in June to receive programmatic input
- Targeting a Notice of Funding Opportunity for early 2024
- Reach out to Meg Patulski (<u>Patulski.Meg@epa.gov</u>) and Kaitlyn Leffert (<u>Leffert.Kaitlyn@epa.gov</u>) for questions

IRA Mobile Source Grants to States: Eligible Entities

- States are eligible entities
- In Clean Air Act section 302(d), "states" are defined as the 50 states, the District of Columbia, and the U.S. Insular Areas
- "States" must also be eligible to adopt and implement CA regulations under Clean Air Act section 177, i.e., must have a plan approved under Part D of the Act (such as attainment plans, maintenance plans, etc.)

IRA Mobile Source Grants to States: Eligible Activities

- Applications for this grant program could cover adoption and/or implementation of California GHG and/or zero-emissions on-road standards, such as:
 - New implementation of already adopted standards
 - New adoption and/or implementation of standards
- Per the requirements of section 177 of the Act, adopted standards must:
 - Be identical to California standards
 - Have an EPA waiver under Clean Air Act section 209 before the state enforces the standard, and
 - Provide 2 years of lead time before an adopted standard can be enforced



Utility Engagement Pledge with EEI and BEL



A primary barrier school districts are facing is uncertainty around charging infrastructure deployment and how to engage with electric companies

 Installation of charging infrastructure can undergo long lead times and requires close coordination with the local utility



EPA is working with national electric utility company organizations to support school districts through a Utility Pledge that includes:

- Facilitating Communication Between Electric Providers and School Districts
- Providing Technical Support and Assistance
- Increasing Funding and Deployment



Additional information on the Utility Pledge and other technical assistance resources are available on: epa.gov/cleanschoolbus technical assistance

Resources available on CSB Website to Assist With Fleet Electrification:

EPA – Clean School Bus Program

- Technical Assistance
- Workforce Development and Training
- EV Charger Energy Star Listings
- Charging and Fueling
 Infrastructure Resources

Joint Office of Energy and Transportation

- AFDC School
 Transportation Page
- Rural EV Toolkit
- NEVI Utility Finder
- Charging Forward:Rural EV Toolkit
- ESB Charging StationPlanning Form

Non-Federal Resources

- 2023 STN Buyer's Guide
- Preparing to Plug In Your BusFleet
- Zeroing in on Electric School Buses
- Power Planner for ElectricSchool Bus Deployment
- ESB US Market Study and Buyer's Guide

epa.gov/cleanschoolbus

Steps in Fleet Electrification

- 1 Choose your fleet composition and complete a route analysis
- •What is your route length, topography, and number of stops?
- •What are the ambient temperatures in your area?
- •What is your bus load (number of passengers)?

- 2 Infrastructure planning and conduct a depot assessment to calculate up-front installation and operating costs with your local utility
- •What is your existing power supply?
- What charging infrastructure is most appropriate for your fleet and the installation costs?
- Are any electrical upgrades needed to support your electric fleet and what is the cost?
- How will electrifying your fleet affect your electricity costs?

- 3 Select and install Electric Vehicle Supply Equipment (EVSE)
- •What is the best charger type for your electric school bus fleet?
- •Are these chargers compatiable with your buses?
- •Is there a certified electrical technician available to supervise EVSE installation and identify the installation timeline?

- 4 Finalize your fleet composition
- •Do your purchasing decisions agree with results of your route analysis?
- •Do your chosen buses meet Clean School Bus Program eligibility requirements?
- •Does the manufacturer offer data collection software to monitor your electric school bus fleet?

- 5 Identify and train personnel needed to operate and maintain the fleet
- •Who will be responsible for performing service and maintenance on the buses?
- Have drivers been trained on how to safely operate an electric school bus?
- •Does everyone understand how to charge the bus and when the bus should be charged?



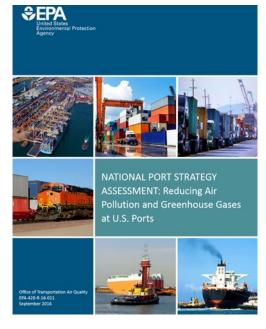




Overview of Resources to Help Port Stakeholders Prepare for Historic Funding Opportunities

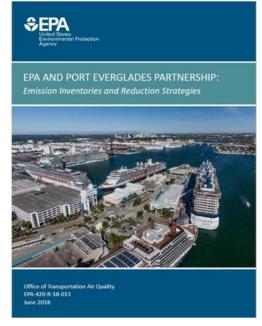
Providing tools to help identify smart infrastructure investments







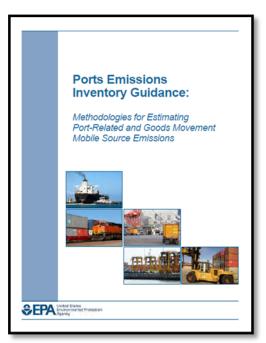
www.epa.gov/ports-initiative/national-portstrategy-assessment-reducing-air-pollutionand-greenhouse-gases-us



EPA, Port Everglades Report Shines Light on New Methods for Analyzing Potential Air Pollution Reductions

June 2018

www.epa.gov/ports-initiative/epa-and-porteverglades-partnership-emission-inventoriesand-reduction-strategies



Port Emissions Inventory
Guidance: Methodologies
for Estimating Port-Related
and Goods Movement
Mobile Source Emissions,
April 2022

https://www.epa.gov/ports-initiative/port-and-goods-movement-emission-inventories

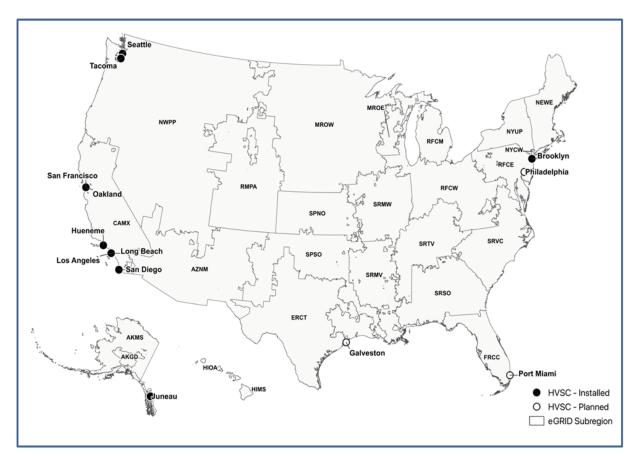


Shorepower report characterizes the technical and operational aspects of shore power systems, December 2022

https://www.epa.gov/portsinitiative/shore-power-technologyassessment-us-ports

2022 Update: Shore Power Technology Assessment and Calculator





Overlay of Installed and Planned High Voltage Shore Power Connection (HVSC) Systems and eGRID Subregions.

- Information on new projects, standards, regulations, vessel readiness, costs
- Lessons learned in LA, Hueneme,
 Seattle, and NY/NJ
- Updated calculator with new emission factors and expanded options for vessel and fuel types to better estimate emissions reductions from shore power

Promoting community-port collaboration for effective planning





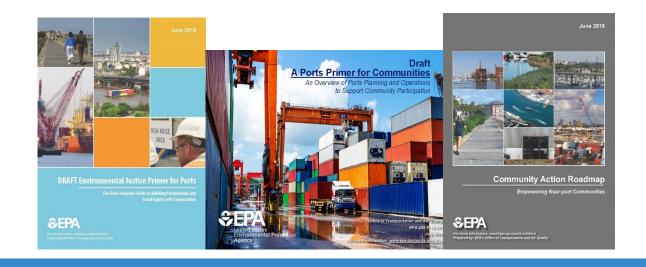
Port of Savannah Tour



Collaboration Training

Tools and training:

- Ports Primer for Communities
- Community Action Roadmap
- EJ Primer for Ports, including Good Neighbor Roadmap
- Case studies: Providence (Region 1), Wilmington (Region 3),
 Savannah (Region 4), New Orleans (Region 6), Los Angeles and Long Beach (Region 9), Seattle (Region 10)



www.epa.gov/community-port-collaboration

Best Practices Web Area Update

Communications

- Best clean air practices generally and for each mobile source sector:
 - Port-wide planning
 - Drayage Trucks
 - Rail Facilities
 - Ocean Going Vessels
 - Cargo Handling Equipment
 - Harbor Craft
- Information:
 - Overview of practice
 - Technical resources
 - Tips on performance targets and data collection
 - Real world examples



www.epa.gov/ports-initiative/bestclean-air-practices-port-operations



Interactive Map Highlighting Clean Air Practices at Ports



Clean Air Practices at Ports

This <u>EPA Ports Initiative</u> Clean Air Practices at Ports tool brings together real-world examples of emissions reduction activities as well as key practices highlighted in the <u>Best Port-Wide Planning Practices to Improve Air Quality</u> webpage. These data were gathered from a review of public websites and EPA's <u>Diesel Emissions Reduction Act</u> (<u>DERA</u>) grant funding for the ports featured in the Bureau of Transportation Statistics' Port Performance Freight Statistics: Annual Report to Congress from <u>2018</u>, <u>2019</u> and <u>2020</u>. To see examples of where each practice is in place, select a button below the map. To learn details about a specific port's practices, select a port on the map and then click on the "Go to Port Profile" button.

Questions or comments? Contact us at talkaboutports@epa.gov.



IRA Clean Ports Program: Definitions

- GREENHOUSE GAS.—The term 'greenhouse gas' means the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride.
- QUALIFIED CLIMATE ACTION PLAN.—a detailed and strategic plan that— "(A) establishes goals, implementation strategies, and accounting and inventory practices to reduce emissions at one or more ports of— "(i) greenhouse gases; "(ii) an air pollutant that is listed pursuant to section 108(a) (or any precursor to such an air pollutant); and "(iii) hazardous air pollutants; "(B) includes a strategy to collaborate with, communicate with, and address potential effects on low-income and disadvantaged near-port communities and other stakeholders that may be affected by implementation of the plan; and "(C) describes how an eligible recipient has implemented or will implement measures to increase the resilience of the one or more ports involved.
- ZERO-EMISSION PORT EQUIPMENT OR TECHNOLOGY.— The term 'zero-emission port equipment or technology' means human-operated equipment or human-maintained technology that— "(A) produces zero emissions of any air pollutant that is listed pursuant to section 108(a) (or any precursor to such an air pollutant) and any greenhouse gas other than water vapor; or "(B) captures 100 percent of the emissions described in subparagraph (A) that are produced by an ocean-going vessel at berth."

IRA Clean Heavy-Duty Vehicle Program: Definitions

- ELIGIBLE VEHICLE.—The term 'eligible vehicle' means a Class 6 or Class 7 heavy-duty vehicle as defined in section 1037.801 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this section).
- GREENHOUSE GAS.—The term 'greenhouse gas' means the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride.
- ZERO-EMISSION VEHICLE.—The term 'zero-emission vehicle' means a vehicle that has a drivetrain that produces, under any possible operational mode or condition, zero exhaust emissions of— "(A) any air pollutant that is listed pursuant to section 108(a) (or any precursor to such an air pollutant); and "(B) any greenhouse gas.".





US DOT Programs that Fund Actions to Reduce Transportation Greenhouse Gas Emissions

Presentation at EPA's Investing in America: Climate Action Funding Fair

August 9, 2023

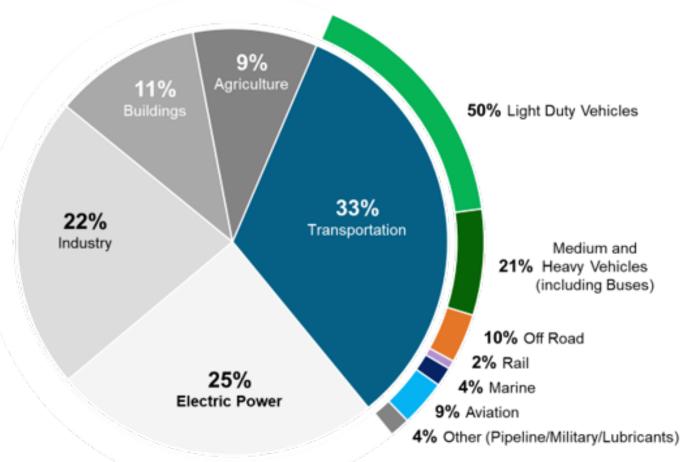
Tina Hodges, US DOT, Office of the Secretary, tina.hodges@dot.gov

Importance of Reducing Transport GHGs



- Transportation is the largest source of U.S. greenhouse gas (GHG) emissions, and it is:
 - responsible for poor air quality (disproportionate impacts)
 - the second largest household expenditure
 - main driver of petroleum demand

2021 U.S. GHG Emissions



Aviation and marine include emissions from international aviation and maritime transport. Fractions may not add up to 100% due to rounding.

U.S. Department of Transportation

US National Blueprint for Transportation Decarbonization

- Developed by DOT, EPA, DOE and HUD
- Guides future policy-making and provides framework for action by federal, regional, state, local, and Tribal governments along with private sector and non-profits
- The goal is **complete decarbonization** of the transportation sector by 2050
- Focuses on delivering results by 2030
- Covers every mode and sets up **realistic**, achievable pathways based on innovation and science

Convenient





















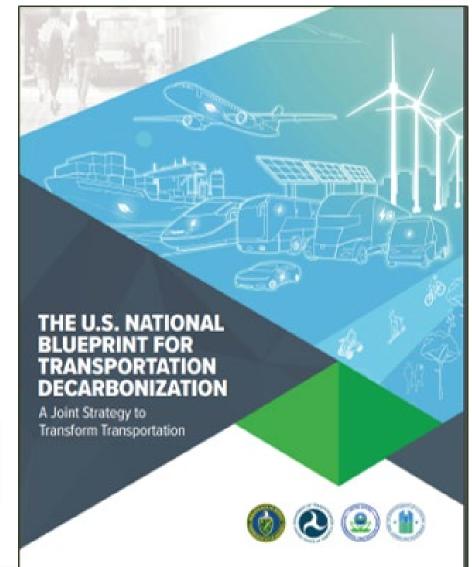




Clean









Increase Options to Travel More Efficiently

Efficient

Carbon Reduction Program

Federal Highway Administration



Key dates	Formula program allocated to State departments of transportation
Amount	Program size: \$6.4 billion from FY22-FY26
What does	Funding for projects to reduce carbon dioxide
the program	emissions from on-road transportation
do or fund?	
Match	Generally 80% federal share
Type of	Formula funding
program	
Who can	State departments of transportation
apply?	
Other key	www.fhwa.dot.gov/environment/sustainability/e
information	nergy/policy/crp_guidance.pdf





Carbon Reduction Program

Federal Highway Administration



Examples of projects that may be eligible*:

Convenient

- bicycle lanes and sidewalks
- travel demand management
- congestion pricing

Efficient

- public transportation
- traffic management
- traffic flow improvements that do not involve construction of new capacity

Clean

- electric vehicle charging infrastructure
- deployment of alternative fuel vehicles
- truck stop electrification
- zero-emission construction equipment
- projects that reduce emissions at ports
- Replace street & traffic lights with energy efficient ones
- Sustainable pavements and construction materials
- Installing solar arrays along highway rights-of-way





Source: USDOE

*Eligible projects are those identified in statute - 23 U.S.C. 175(c) plus other projects that can demonstrate emission reductions.

Source: PBIC

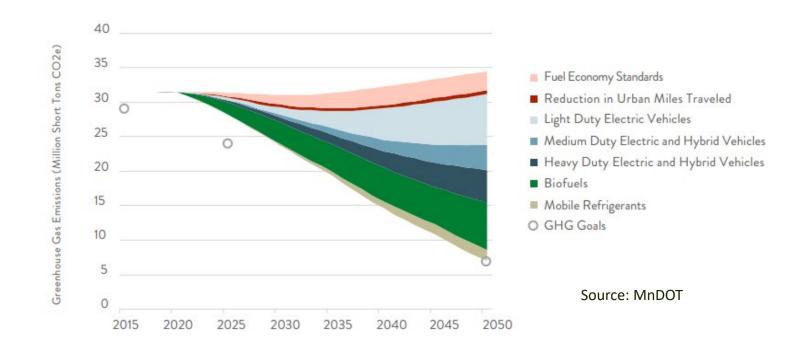
Carbon Reduction Program

Federal Highway Administration



Carbon Reduction Strategies

- Required by November 15, 2023
- Developed by States in consultation with any MPO(s) within the State
- Identify projects and strategies to reduce transportation emissions
- Certified by the Secretary
- Updated at least every four years
- May use CRP funds to develop



- >States are encouraged to use Carbon Reduction Program funding for projects that support the Strategies.
- ➤ States may use CRP funding before developing a Carbon Reduction Strategy.

Low or No Emission Bus Program

Federal Transit Administration



Key dates	Annual. These were the 2023 dates: Post: January 27, 2023 Applications due: April 13, 2023 Award Announcement: June 26, 2023
Amount	Program size: \$1.1 billion in FY2024 Award size: ranged from \$200,000 to \$47 million in 2023 Requests: FTA received \$8.7 billion in requests in 2023
What does the	purchase or lease of zero-emission and low-emission transit
program do or	buses, as well as the acquisition, construction, or leasing of
fund?	supporting facilities and equipment
Match	80-90% federal share
Type of program	Competitive grants
Who can apply?	State and local government, Public transportation agencies, Tribes
Other key	https://www.transit.dot.gov/lowno
information	



Transit Oriented Development Pilot Program



Federal Transit Administration

Key dates	Notice of Funding Opportunity (NOFO) to be published August 2023
Amount	Program size: \$13 million in 2023. Award size: \$200,000 to \$1.6 million in 2022
What does the program	provides funding to local communities to integrate land use and transportation planning
do or fund?	with major public transportation investments
Match	80% federal share maximum
Type of program	Competitive grants
Who can apply?	Existing FTA grantees. Must be partnership between project sponsor of a transit capital
	project and an entity with land use planning authority.
Other key information	www.transit.dot.gov/TODPilot





U.S. Department of Transportation

Other DOT Funding Programs Related to Climate

- National Electric Vehicle Infrastructure (NEVI) Formula Program provides \$5 billion to deploy electric vehicle charging infrastructure
- Charging and Fueling Infrastructure Discretionary Grant Program provides \$2.5 billion to deploy electric vehicle charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure in communities, along designated Alternative Fuel Corridors and in other publicly accessible locations.
- Low Carbon Transportation Materials Grants \$2 billion
- Discretionary Grant Programs include climate change criteria (RAISE, INFRA, MEGA)
- Formula programs have broad eligibilities, including for reducing GHG





Funding Programs with a Focus on Climate Change



Air

- Voluntary Airport Low Emissions Program
- Zero Emissions Vehicle Program
- Airport Zero Emissions Vehicle and Infrastructure Pilot Program
- Fueling Aviation's Sustainable Transition via Sustainable Aviation Fuels (FAST-SAF)
- Low-Emission Aviation Technologies (FAST-Tech) Grant Program

Rail

- Consolidated Rail Infrastructure and Safety Improvements (CRISI) Provision 16 funding to replace inefficient locomotives with cleaner alternatives.
- Federal-State Partnership for Intercity Passenger Rail Grant
 Program expands and improves the Nation's intercity passenger rail system to increase access to more efficient intercity transportation options.

Ports

Reduction of Truck Emissions at Port Facilities Program - provides \$400
million in competitive funding to reduce truck idling and emissions at ports,
including through the advancement of port electrification.

Ferries

Electric or Low-Emitting Ferry Pilot Program









DOT Navigator

- Resources to apply for grants and deliver transformative projects including:
 - Grant-making process and requirements
 - Resources from public agencies and stakeholders
 - Accessing funding
 - Climate Checklist
 - <u>Link</u>

DOT Thriving Communities Program

- Helping to ensure disadvantaged communities have the tools to compete for federal aid and deliver quality projects
- Part of interagency Thriving Communities Network
- Link

Volpe Project Delivery Center of Excellence

- Accelerating successful BIL implementation
- Project Delivery
 Toolbox: best
 practices on public
 engagement,
 environment and
 equity
 considerations, and
 more.
- Link

Transportation Planning Capacity Building Program

- Training and technical assistance for state, local, regional, Tribal governments, transit operators, and community leaders on transportation planning
- Includes links to all State and MPO transportation plans
- Link



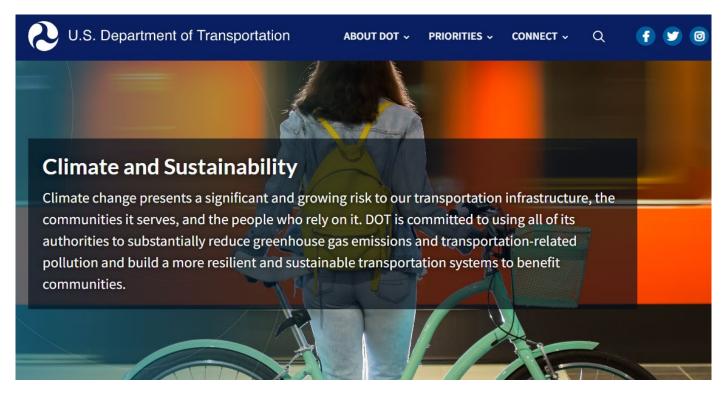
USDOT Climate Change Website

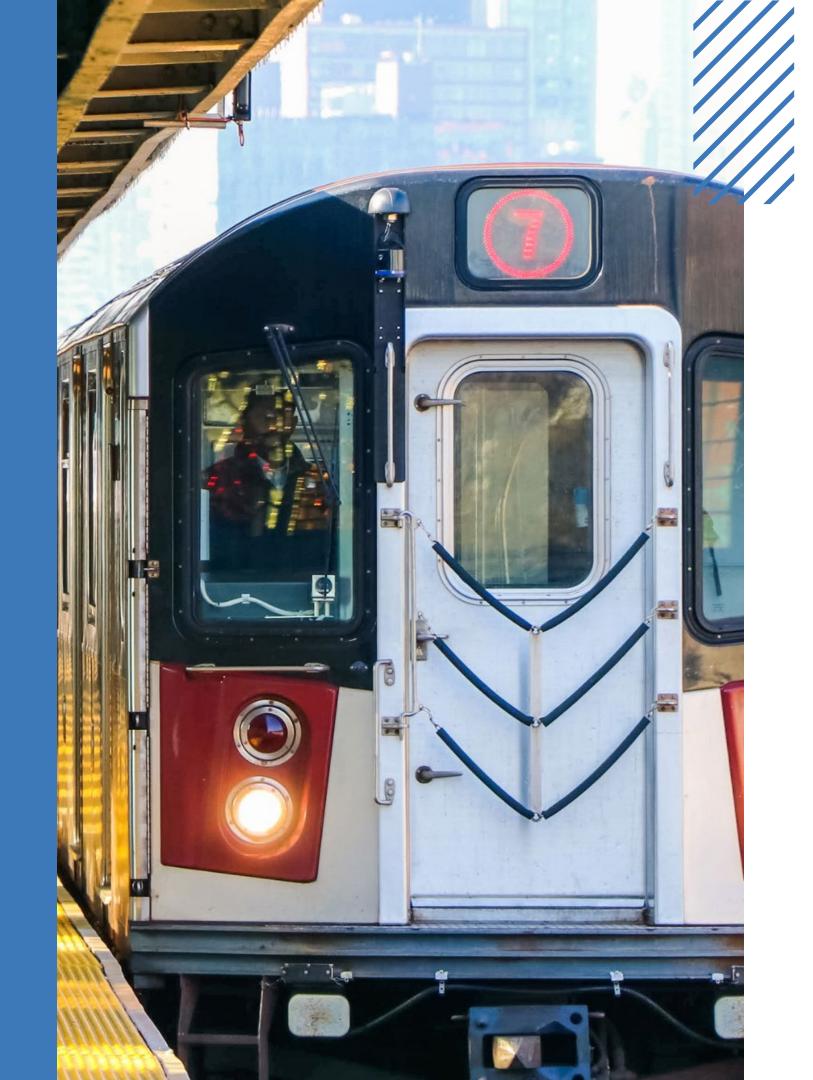
DOT Climate Change Center

DOT Funding Programs and Climate Change

DOT Technical Assistance on Reducing GHG

Joint Office of Energy and Transportation







Question & Answer Session



